

“The natives say that it builds its nest in the cocoanut trees, and is always about them, hence its local name of ‘Cocoanut Bird.’ They also told us that it remained throughout the year; that the eggs were pure white; and that the young birds differed from the old in plumage. From the condition of the organs of generation, it seems that the bird breeds during the month of June.

“The stomachs of those examined contained the remains of a grasshopper, beetles, and seeds; hence it may be inferred that its food consists of fruits and insects.”

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A LIST OF BIRDS FROM NORTHEAST BORNEO,  
WITH FIELD NOTES BY MR. C. F. ADAMS.

BY D. G. ELLIOT.

THE greater portion of the species enumerated in this paper were obtained by Mr. Adams in the vicinity of Sandakan. The extent and character of the region explored in making this collection is very fully described by Mr. Adams in the following paragraphs, which, with the field notes relating to the species, he has kindly furnished. Mr. Adams sent his collection of birds to the American Museum of Natural History for identification, and specimens of all the species given below (except three, Nos. 43, 58 and 83, included on Mr. Adams's own authority) have passed through my hands. The types of *Copsychus adamsi* (sp. nov.), and a set of duplicates from the collection, have been kindly presented by Mr. Adams to the American Museum.

[The following notes refer to birds collected in a narrow east and west tract lying in that particular part of British North Borneo between 5° 30' and 5° 40' N. Lat., and crossed by the meridian of 118° E., during the time from May, 1887, until Feb., 1888, while making a specialty of collecting the mammals of that region. The list includes a fair representation of what one may expect to find in that locality, although in a number of cases but one specimen of a species was observed. As is usual with the coast region of Borneo, this region is for the most part low, with occasionally

a hill or knoll to break the monotony of swamp and tide-affected rivers. The latter are numerous, and the most of them short, being brackish near or quite to their sources at high tide. Sandakan Harbor receives about a dozen of these short streams, which flow from the low lands lying to the south and west. The north side of the harbor is bounded by bluffs, or rather a range of hills, which run parallel with that side. At a point about ten miles southeast of the mouth of Sandakan Harbor the Kinabatangan, which is one of the largest rivers of the country, flows into the sea. Near its mouth, as is also the case with the other rivers, a growth of mangrove borders its channel, which at high tide it over-flows for an indefinite distance. Next in ascending order come the Nipa palms which extend for a few miles, being succeeded, as the country becomes a little higher, by the tropical forest made up of a variety of trees, many of which bear fruit.

In consequence of the seasons not being well marked, fruits are ripening in every month of the year.

The view one gets from a boat in ascending the Kinabatangan River gives an impression that the forest stands on high ground, and extends back indefinitely, but usually it is found that at a distance of a few hundred yards it gives place to boggy swamps containing scattering, stunted trees, vines, and various kinds of thorny growths. This is especially the case with the lower portion of the river.

The birds in this collection were taken among the range of hills just back of Sandakan Harbor, on Bahala Island, at the mouth of the harbor, and up the Kinabatangan, Suanlamba, and Sapagaya Rivers.

In these regions bird life may be said to be abundant, except in the mangrove districts where it might be expected that Herons or other water birds would have been found breeding, but not a single rookery was observed, an occasional Heron, Darter, or Kingfisher being the only birds noticed.

Early in the day mammals and birds are very active, but from eleven until three in the afternoon the heat induces them to retire to some dense shade where the hottest part of the day is passed.

As another consequence of the seasons not being well marked, the moulting of birds is very irregular, and of one species of Hornbill (*Buceros galcatus*) not a single specimen was taken during the seven or eight months of collecting that was in good plumage.—C. F. A.]

## ORDER PASSERES.

## FAMILY TURDIDÆ.

1. *Geocichla interpres*.

*Turdus interpres* TEMM. Plan. Color. pl. 458. — LESS. Trait. Ornith. p. 410 (1831).

*Geocichla interpres* SHARPE, Cat. B. V, p. 166.

Suañlamba River. A single specimen differs somewhat from *G. interpres*, by not having any ochraceous on the flanks.

[Found in damp situations. Shy. — C. F. A.]

2. *Copsychus adamsi*, sp. nov.

*Adult Male*: — Entire plumage glossy purplish black, shading to a slaty gray on lower part of abdomen. A large, white patch on wing including least, median and greater coverts, with a black inner web to the innermost greater coverts. The edge of outer web on the sixth secondary of the right wing is white for two thirds its length from the base. This does not exist on the left wing and is possibly abnormal. Tail, feet, and bill black. "Iris dark brown." Total length (skin), 8¼ in. Wing 4¼. Bill, ⅝. Tail, 4. Tarsus 1½ in.

*Female*. — Above glossy black, like the male, but with the outer web of the sixth secondary broadly edged with white. Below ashy gray, the throat and breast with a strong bluish cast. Otherwise like the male, except slightly smaller.

A nearly mature male differs from the male above described in having the lower abdomen and flanks ashy.

Types, No. 49,677, ♂, No. 49,678, ♀, Am. Mus. Nat. Hist., Sandakan, May 11 and 12, 1887; C. F. Adams.

This bird resembles closely *C. seychellarum* A. Newton (Ibis, 1865, p. 332, pl. 8.) from the Seychelles, but is smaller in all its measurements, those given of Newton's type being as follows: tot. length 10.5 in.; culmen 1; wing 4.9; tail 4.7; tarsus 1.55. It is rather singular to find so near a representative of a Seychelles species in Borneo.

[Rather common along clear brooks in shady situations. — C. F. A.]

3. *Cittocinclia stricklandi*.

*Copsychus stricklandi* MOTT. & DILL, Nat. Hist. Lab. p. 20, pl. iv [1855].

*Kittocinclia stricklandi* SALV. Ucc. Born. p. 253 (1874).

*Cittocinclia stricklandi* SHARPE, Cat. B. VII, p. 88 (1883); *id.* Ibis, 1889, p. 270.

[Sandakan. Iris dark brown. Found along clear brooks in company with the last species. Although probably seldom seeing man, it is exceedingly wild, uttering sharp, chirping notes and quickly flying away at the first appearance of an intruder. — C. F. A.]

#### FAMILY PYCNONOTIDÆ.

#### 4. *Chloropsis zosterops*.

♂ *Chloropsis gampsorhynchus* JARD. & SELB. Ill. Ornith. pl. 7 (1826).  
*Chloropsis zosterops* VIG. App. Mem. Life Raffl. p. 674. — SHARPE, Cat. B. VI, p. 24 (1880).

*Phyllornis sonneratii* (nec JARD. & SELB.) BLYTH, Journ. Asiat. Soc. Beng. XI, p. 109 (1842). — JERD. B. Ind. II, p. 100 (1863). — SALV. Ucc. Born. p. 193 (1874).

*Phyllornis javensis* (nec HORSEF.) GOULD, B. Asia, Pt. XII. — WALDEN, Ibis, 1871, p. 168.

*Phyllornis viridis* TWEED. Ibis, 1877, p. 305.

[Sandakan. Iris dark brown. Common among low bushes in cleared districts. — C. F. A.]

#### 5. *Criniger phæocephalus*.

*Ixos phæocephalus* HARTL. Rev. Zool. 1844, p. 401.

*Trichophorns caniceps* LAFRES. Rev. Zool. 1845, p. 367.

*Criniger phæocephalus* SALV. Uccell. Born. p. 207 (1874). — SHARPE, Cat. B. VI, p. 74 (1881); *id.* Ibis, 1889, p. 274.

[Sapagaya River. Iris brown. — C. F. A.]

#### 6. *Irena crinigera*.

*Irena turcosa* (nec WALD.) SHARPE, Ibis, 1876, p. 44.

*Irena crinigera* SHARPE, Ibis, 1879, p. 257; *id.* Cat. B. VI, p. 176 (1881); *id.* Ibis, 1889, p. 277.

[Sandakan. Iris reddish orange. Common. Found high up in the largest fruit trees, with the Hornbills, Pigeons, etc. — C. F. A.]

The specimens before me have the under tail coverts extending quite to the tips of the rectrices, and small blue spots on the innermost greater wing-coverts. I follow Sharpe in the name of this species, as, not having any specimen from Java to compare with, I am unable to determine the specific value of the Bornean birds.

## FAMILY TIMELIIDÆ.

7. *Orthotomus cinerascens*.

*Orthotomus scpinum* LAFRES. Mag. Zool. 1836, pl. 51 (*nec* HORSF.).

*Orthotomus cinerascens* BLYTH, Jour. As. Soc. Beng. XIV, p. 489 (1845).

—SALV. Ucc. Born. p. 248 (1874). —SHARPE, Cat. B. VII, p. 225, (1883); *id.* Ibis, 1889, p. 279.

*Orthotomus borneonensis* SHARPE, Ibis, 1876, p. 41, pl. 11, fig. 1.

[Suanlamba River. Iris light hazel. —C. F. A.]

8. *Stachyris nigricollis*.

*Timalia nigricollis* TEMM. Plan. Col. pl. 594, fig. 2.

*Timelia nigricollis* SALV. Ucc. Bor. p. 212 (1874).

*Stachyris nigricollis* SHARPE, Cat. B. VII, p. 535 (1883).

[Suanlamba River. Iris red. A fine songster. —C. F. A.]

9. *Turdinus atrigularis*.

*Cacopitta atrigularis* BON. Consp. Av. I, p. 257 (1850).

*Turdinus atrigularis* SALV. Ucc. Born. p. 217 (1874).—SHARPE, Cat. B. VII, p. 549 (1883).

[Sapagaya River. Iris hazel. Legs light brown. Bare skin behind eye blue. Frequents the ground much after the manner of the Pittas.—C. F. A.]

10. *Dryocatataphus capistratoides*.

*Myiothera capistratoides* TEMM. Mus. Lugd.?

*Goldana capistratoides* STRICKL. Contr. Ornith. 1849, p. 128, pl. 36.

*Dryocatataphus capistratoides* STRICKL. Contr. Ornith. 1857, p. 16.—

SALV. Ucc. Born. p. 218 (1874).—SHARPE, Cat. B. VII (1883);

*id.* Ibis, 1877, p. 11; 1879, p. 258; 1889, p. 415.

[Kinabatangan River. Iris brown. This little bird frequents the same situations as the Pittas, running along through dense brush, taking short flights only to re-alight on the ground.—C. F. A.]

I am somewhat in doubt whether to designate the single specimen obtained as *D. nigricapitata* or the present species, since the ear-coverts are much more ashy than black, and the mandible is decidedly yellow and not lead-color. Are the two forms really specifically distinct?

## FAMILY ORIOLIDÆ.

11. *Oriolus xanthonotus*.

*Oriolus xanthonotus* HORSE. Trans. Linn. Soc. XIII, p. 153 (1821).—SALV.

Ucc. BORN. p. 277 (1874).—SHARPE, Cat. B. III, p. 213 (1874);

*id.* Ibis, 1879, p. 251; 1889, p. 185.

[Sandakan. Iris red.—C. F. A.]

## FAMILY CERTHIIDÆ.

12. *Dendrophila corallipes*.

*Dendrophila corallipes* SHARPE, Ibis, 1888, p. 479; 1889, p. 420.

[Sandakan. Iris yellow. Bill, eyelids and legs red. Runs over the tree trunks in the same manner as our Nuthatches.—C. F. A.]

## FAMILY LANIIDÆ.

13. *Hyloterpe grisola*.

*Tephradornis grisola* BLYTH, Jour. Asiat. Soc. Beng. XI, p. 799 (1842).

*Hyloterpe grisola* SALV. Ucc. BORN. p. 157 (1874).—SHARPE, Proc. Zool.

Soc. 1879, p. 341.

*Pachycephala grisola* SHARPE, Cat. B. VIII, p. 220.

*Hyloterpe grisola* SHARPE, Ibis, 1889, p. 419.

Sandakan.

## FAMILY DICRURIDÆ.

14. *Chaptia malayensis*.

*Chaptia malayensis* BLYTH, Jour. Asiat. Soc. Beng. XV, p. 294 (1846).

—SALV. Ucc. BORN. p. 153 (1874).—SHARPE, Cat. B. III, p. 244 (1877).

[Sapagaya River. Iris brown. Shot among trees in an old clearing. Seems very restless.—C. F. A.]

15. *Dissemurus brachyphorus*.

*Edolius brachyphorus* BON. Consp. I, p. 351 (1850).

*Dissemurus brachyphorus* CAB. Mus. Hein. I, p. 112 (1850).—SALV. Ucc.

BORN. p. 154 (1874).—SHARPE, Ibis, 1876, p. 45; 1879, p. 251; 1889, p. 45.

*Dissemurus paradiseus* SHARPE, Cat. B. III, 258 (1877), in part.

[Kinabatangan River, December, 1887. Iris dark red. Found in wooded places near rivers. Seems to prefer spots where there is little undergrowth to interfere with short cross flights. It is rather restless, twisting from side to side on its perch, causing the spatulate ends of the long outer tail feathers to appear as objects hovering behind the bird, since the shaft between the broad tip and the basal part of the feather is so narrow as to be invisible at a short distance.—C. F. A.]

FAMILY PRIONOPIDÆ.

16. *Hemipus obscurus*.

*Muscicapa obscura* HORSF. Trans. Linn. Soc. XIII, p. 146 (1822).

*Tephrodornis hirundinaceus* SCL. Proc. Zool. Soc. 1863, p. 217.

*Hemipus obscurus* SHARPE. Cat. B. III, p. 305 (1877); *id.* Ibis, 1889, p. 189. Suanlamba River.

17. *Platylophus coronatus*.

*Lanius coronatus* RAFF. Trans. Linn. Soc. XIII, p. 306 (1822).

*Lophocitta coronata* CAB. Mus. Hein. I, p. 219.

*Platylophus coronatus* SALV. Ucc. Born. p. 280 (1874).—SHARPE, Cat. B. III, p. 318 (1877); *id.* Ibis, 1889, p. 190.

[Kinabatangan River. Iris brown; legs leaden blue. Apparently of an inquisitive disposition, hopping about overhead with its fine crest turned far forward, peering down on the intruder below.—C. F. A.]

FAMILY CAMPOPIAGIDÆ.

18. *Pericrocotus igneus*.

*Pericrocotus igneus* BLYTH, Jour. Asiat. Soc. Beng. XV, p. 309 (1846).

—SALV. Ucc. Born. p. 144 (1874).—SHARPE, Cat. B. IV, p. 78 (1879); *id.* Ibis, 1889, p. 192.

[Sandakan. Iris red. Common.—C. F. A.]

19. *Lalage culminata*.

*Ceblepyris culminata* HAY, Madr. Journ. XIII, p. 157.

*Volvocivora schierbrandii* SALV. Ucc. Born. p. 148 (1874).

*Lalage culminata* SHARPE, Cat. B. IV, p. 104 (1879); *id.* Ibis, 1889, p. 194.

[Sandakan. Iris black.—C. F. A.]



## FAMILY MUSCICAPIDÆ.

20. *Hypothymis occipitalis*.

*Muscicapa occipitalis* VIGORS, Proc. Zoöl. Soc. 1831, p. 97.

*Hypothymis azurea* SALV. Ucc. Born. p. 133 (1874).—SHARPE, Ibis, 1877, p. 18.

*Hypothymis occipitalis* SHARPE, Cat. B. IV, p. 275 (1879); *id.* Ibis, 1889, p. 197.

[Suanlamba River. Iris black.—C. F. A.]

21. *Rhipidura perlata*.

*Rhipidura perlata* MÜLL. Natuurl. Gesch.-Land-en Volkenk. p. 185 (1839, 44).—SHARPE, Cat. B. IV, p. 328 (1889); *id.* Ibis, 1889, p. 199.

*Leucocerca perlata* SALV. Ucc. Born. p. 136 (1874).

[Sandakan. Iris brown. Very common. In movements resembles our Redstarts.—C. F. A.]

22. *Philentoma pyrropterum*.

*Muscicapa pyrropterum* TEMM. Plin. Col. 596, fig. 2.

*Philentoma pyrropterum* SHARPE, Cat. B. IV, p. 366 (1879); *id.* Ibis, 1889, p. 200.—SALV. Ucc. Born. p. 138 (1874).

[Sandakan. Iris brown. Very common.—C. F. A.]

23. *Stoparola thalassinoides*.

*Glaucomyias thalassoides* CAB. Mus. Hein. I, p. 53, note (1850).

*Stoparola thalassinoides* SALV. Ucc. Born. p. 132 (1874).—SHARPE, Cat. B. IV, p. 439 (1879); *id.* Ibis, 1889, p. 205.

[Suanlamba River. Iris dark brown.—C. F. A.]

24. *Siphia beccariana*.

*Siphia beccariana* SALV. Atti. R. Acad. Sc. Tor. III, p. 533 (1868)

—SHARPE, Cat. B. IV, p. 452 (1876).

[Suanlamba River. Iris brown.—C. F. A.]

25. *Terpsiphone affinis*.

*Muscipeta paradisea* EYTON, P. Z. S, 1830, p. 102 (*nec* LINN.)

*Tchitrea affinis* BLYTH, Journ. As. Soc. Beng. XV, p. 292.



*Terpsiphone affinis* SALV. Ucc. Bor. p. 137 (1874). — SHARPE, Cat. B. IV, p. 349 (1879); *id.* Ibis, 1877, p. 19; 1889, p. 200.

[Sandakan, May 23, 1887. Iris dark brown; bill and eyelids deep purplish blue. Rather uncommon in the regions visited. While dashing about after insects it is very conspicuous (the male) on account of its light colors against the dark background of tropical foliage. As it describes graceful curves during its flight, the long feathers of the tail make it appear as an animated pennant.—C. F. A.]

#### FAMILY HIRUNDINIDÆ.

##### 26. *Hirundo javanica*.

*Hirundo javanica* SPARR. Mus. Carl. pl. 100 (1789). — TEMM. Pl. Col. 83, fig. 2.—SALV. Ucc. Born. p. 126 (1874).—SHARPE, Cat. B. X, (1885); *id.* Ibis, 1889, p. 430.

Sandakan. Iris brown.

#### FAMILY DICÆIDÆ.

##### 27. *Dicæum trigonostigma*.

*Certhia trigonostigma* SCOP. Flor. et Faun. Insub. p. 91 (1786).

*Dicæum trigonostigma* SALV. Ucc. Born. p. 166 (1874).—SHARPE, Cat. B. X, p. 38 (1885); *id.* Ibis, 1889, p. 429.

Suanlamba River. Iris brown.

#### FAMILY NECTARINIDÆ.

##### 28. *Cinnyris jugularis*.

*Certhia jugularis* LINN. Syst. Nat. I, p. 185 (1766).

*Cinnyris jugularis* SHELLEY, Mon. Nec. I, pl. 93 (1876-1880).

[Sandakan. Iris brown. Common.—C. F. A.]

##### 29. *Anthothreptes phœnicotis*.

*Nectarinia phœnicotis* TEMM. Pl. Col. 108, fig. 1, 388, fig. 2.

*Anthreptes phœnicotis* SHELLEY, Mon. Nec. p. 325, pl. 105.

*Anthothreptes phœnicotis* SHARPE, Ibis, 1889, p. 425.

*Chalcoparia singalensis* SALV. Ucc. Born. p. 180 (1874).

[Suanlamba River. Iris red. Rather common among bushes in old clearings.—C. F. A.]

30. *Arachnothera chryso-genys*.

*Arachnothera chryso-genys* TEMM. Pl. Col. 388, fig. 1.—SALV. Ucc. BORN. p. 181 (1874).—SHELLEY, Mon. Nec. p. 365, pl. 117.—SHARPE, Ibis, 1889, p. 426.

[Sandakan. Iris dark brown.—C. F. A.]

31. *Arachnothera flavigastra*.

*Anthreptes flavigaster* EYTON, P. Z. S. 1839, p. 105.

*Arachnothera flavigastra* BLYTH, Journ. As. Soc. Beng. XIV, p. 557 (1845).

*Arachnorhaphis flavigastra* SHELLEY, Mon. Nect. p. 373, pl. 120.

*Arachnothera flaviventris* GADOW, Br. Mus. Cat. B. IX, p. 109 (1884).

[Suanlamba, Jan. 21, 1888. Iris brown.—C. F. A.]

## FAMILY PLOCEIDÆ.

32. *Munia fuscans*.

*Spermestes fuscans* CASS. Proc. Acad. Sc. Phil. VI, p. 185 (1852); *id.* Journ. Ac. N. Sc. Phil. III, p. 69, pl. 3, fig. 3, (1855).

*Munia fuscans* SALV. Ucc. BORN. p. 268 (1879).—SHARPE, Proc. Zoöl. Soc. 1879, p. 344; *id.* Ibis, 1889, p. 434.

[Sandakan. Iris dark brown. Frequents coarse grass in open situations.—C. F. A.]

## FAMILY STURNIDÆ.

33. *Gracula javanensis*.

*Corvus javanensis* OSBECK, Iter. p. 102 (1757).

*Gracula javanensis* SALV. Ucc. BORN. p. 274 (1874).—SHARPE, Ibis, 1889, p. 432.

[Sandakan. Iris brown. Legs and wattles chrome yellow, brightening to orange in middle of patch on side of head; basal part of beak reddish, graduating into yellow toward the tip. Rather common. Its note is a strong mellow whistle. Feeds on berries and small fruits. Near a camping place in an old clearing a pair used to come each evening just before dark and alight on the dead stub of a tree, where they kept up a whistling until it was rather dark and then crawled into a hollow to pass the night.—C. F. A.]

## FAMILY CORVIDÆ.

34. *Platysmurus aterrimus*.

*Glaucopis aterrimus* TEM. Pl. Col. Liv. 57 (1825.)

*Platysmurus aterrimus* SALV. Ucc. Bor. p. 279 (1874). — SHARPE, Cat. B. III, p. 91 (1877); *id.* Ibis, 1889, p. 85.

[Suanlamba River. Iris red. Goes in small flocks. Its note very much resembles that of our common Crow. — C. F. A.]

## FAMILY PITTIDÆ.

35. *Pitta cœrulea*.

*Miyothera cœrulea* RAFF. Trans. Linn. Soc. XIII, p. 301 (1822).

*Brachyurus cœruleus* ELLIOT, Mon. Pitt. pl. i (1863); *id.* Ibis, 1870, p. 412.

[Suanlamba River. Iris brown. But one specimen, a female, was seen. — C. F. A.]

36. *Pitta venusta*.

*Pitta venusta* TEMM. Pl. Col. 500. — SALV. Ucc. Born. p. 244, (1874).

*Brachyurus venustus* ELLIOT, Mon. Pitt. pl. xiv, (1863), *id.* Ibis, 1870, p. 416.

[Suanlamba River. Iris brown. Legs dusky blue. Generally observed on the ground but sometimes perched on the twig of a fallen branch or hopping lightly along a log. The flight, as of the other species, is usually quite short, consisting merely of passing near the ground from one slightly elevated position across pools of water to another. On dry ground they may disappear by hopping away through the dense brush. This beautiful species was sometimes found sitting on a log with point of beak elevated, softly whistling a very mellow and musical strain. — C. F. A.]

37. *Pitta baudi*.

*Pitta baudi* MÜLL. & SCHLEG. Verh. Nat. Gesch. Ned. Ind. pl. 2 (1839-44). — SALV. Ucc. Born. p. 243. (1874). — SHARPE, Ibis, 1889, p. 441.

*Brachyurus baudi* ELLIOT, Mon. Pitt. pl. xxii (1863); *id.* Ibis, 1870, p. 419.

[Sapagaya River. Iris brown. Legs and feet pale flesh color. Found in nearly the same situations as the preceding species, but seems to prefer drier and more open places. — C. F. A.]

### 38. *Pitta sordida*.

*Turdus sordidus* P. L. S. MÜLL. Natur. Anh. p. 143 (1776).

*Pitta mülleri* SALV. Ucc. Born. p. 240 (1874).—SHARPE, Ibis, 1889, p. 443.

*Brachyurus mülleri* ELLIOT, Mon. Pitt. pl. xxvi (1863).

*Brachyurus atricapillus* ELLIOT, Mon. Pitt. pl. xxv (1863).

*Brachyurus sordidus* ELLIOT, Ibis, 1870, p. 419.

[Kinabatangan River. Iris brown; legs flesh color with a faint wash of blue. Not common. Exceedingly shy, and difficult to shoot, as it flies to such a distance as seldom to be started a second time. — C. F. A.]

## FAMILY EURYLAIMIDÆ.

### 39. *Eurylaimus javanicus*.

*Eurylaimus javanicus* HORSF. Trans. Linn. Soc. XIII, p. 170 (1821.) —

SALV. Ucc. Born. p. 107 (1874).—SCLAT. Cat. B. XIV, p. 463 (1888). — SHARPE, Ibis, 1889, p. 439.

[Kinabatangan River. Iris dark brown; bill cobalt-blue above with black cutting edges. — C. F. A.]

### 40. *Eurylaimus ochromelas*.

*Eurylaimus ochromelas* RAFFLES, Trans. Linn. Soc. XIII, p. 297 (1822).

— SALV. Ucc. Born. p. 108 (1874). — SCLAT. Cat. B. p. 465 (1888). SHARPE, Ibis, 1889, p. 439.

[Kinabatangan River. Iris yellow; bill cobalt above with black cutting edges, below yellow. — C. F. A.]

### 41. *Cymborhynchus macrorhynchus*.

*Todus macrorhynchus* GMEL. Syst. Nat. I, p. 446 (1788).

*Cymbirhynchus nasutus* VIG. App. Mem. Raff. p. 654 (1831).

*Cymborhynchus macrorhynchus* SALV. Ucc. Born. p. 109 (1874).—SCLAT. Cat. B. p. 468 (1888).

*Cymbirhynchus macrorhynchus* SHARPE, Ibis, 1880, p. 440.

[Kinabatangan River. Iris bronzy green; bill above, and edges of mandible, bright blue. Rest of mandible yellow. The most common of the Broad-mouths taken. Easily shot; it seems stupid. — C. F. A.]

42. *Corydon sumatranus*.

*Coracias sumatranus* RAFF. Trans. Linn. Soc. XIII, p. 303 (1822).

*Corydon sumatranus* STRICKL. Ann. Mag. Nat. Hist. VI, p. 418 (1844). —  
SALV. Ucc. Born. p. 111 (1874). — SCLAT. Cat. B. XIV, p. 466  
(1888). — SHARPE, Ibis, 1889, p. 440.

[Sandakan. Iris dark brown. Bare skin on head pale reddish carmine.  
—C. F. A.]

## ORDER PICARIÆ.

## FAMILY CYPSELIDÆ.

43. [*Callocalia fuciphaga*.

Iris black. This species breeds in caves and crevices of rocks where the nest is sheltered.

The British North Borneo Company receives annually a considerable sum as export duty on the nests of this species which are sent to China to be used in soups.

The salivary glands which secrete the mucus of which the nests are composed are very large for so small a bird.—C. F. A.]

44. *Callocalia linchii*.

*Hirundo fuciphaga* HORSF. (*nee* THUNB.) Trans. Linn. Soc. XIII, p. 143 (1821.)

*Callocalia linchii* HORSF. & MOORE, Cat. B. Mus. E. Ind. Comp. I, p. 100 (1854). — SALV. Ucc. Born. p. 121 (1874). — SHARPE, Ibis, 1890, p. 23.

[Suanlamba River. Iris black. Shot while flying about in a clearing.  
—C. F. A.]

45. *Dendrochelidon comata*.

*Cypselus comatus* TEMM. Plin. Col. p. 268 (1824).

*Dendrochelidon comata* SALV. Ucc. Born. p. 123 (1874). — SHARPE, Ibis, 1890, p. 23.

[Iris brown. Found in clearings back of Sandakan, perched on branches of dead trees.—C. F. A.]

46. *Dendrochelidon longipennis*.

*Hirundo longipennis* RAFF. Bull. Sc. Soc. Phil. III, p. 153 (1804).

*Dendrochelidon longipennis* SALV. Ucc. Born. p. 122 (1874).—SHARPE, Ibis, 1890, p. 24.

[Sandakan. Iris brown. Taken in the same situations as the former.—C. F. A.]

## FAMILY TROGONIDÆ.

47. *Harpactes kasumba*.

*Trogon kasumba* RAFF. Trans. Linn. Soc. XIII, p. 28 (1822).

*Pyrotrogon kasumba* SALV. Ucc. Born. p. 29 (1874).

*Harpactes kasumba* SHARPE, Ibis, 1890, p. 3.

[Sandakan. Iris very dark. Tip of bill and line over culmen deep blue, rest black.—C. F. A.]

48. *Harpactes diardi*.

*Trogon diardi* TEMM. Plan. Col. pl. 541.—GOULD. Mon. Trog. pl. 30.

*Pyrotrogon diardi* SALV. Ucc. Born. p. 28 (1874).

*Harpactes diardi* SHARPE, Ibis, 1890, p. 3.

[Sandakan. Iris dark brown. Top of bill and fore part of cutting edge and line on culmen black; other parts blue. Skin around eye purple. Not common. Found in shady places where there is a scarcity of undergrowth. Active towards the middle of the day.—C. F. A.]

49. *Harpactes duvauceli*.

*Trogon duvauceli* TEMM. Plan. Col. 291.—GOULD, Mon. Trog. pl. 32.

*Harpactes duvauceli* SHARPE, Ibis, 1890, p. 3.

*Pyrotrogon duvauceli* SALV. Ucc. Born. p. 29 (1874).

[Sandakan. Iris brown; bare skin over eye and gape dark blue; bill blue and black as in *H. kasumba*.

This specimen furnishes a striking example of how feebly a dried skin conveys an idea of what the natural life appearance really is. In life some of the fading parts of these tropical birds are vividly rich in color which, combined with the freshness of the plumage, excites the admiration of the most indifferent. — C. F. A.]

(To be continued.)